ESC/SR
ISR Integration

STEEL EAGLE/ARGUS
Program Overview
for
PEOSYSCOM Panel

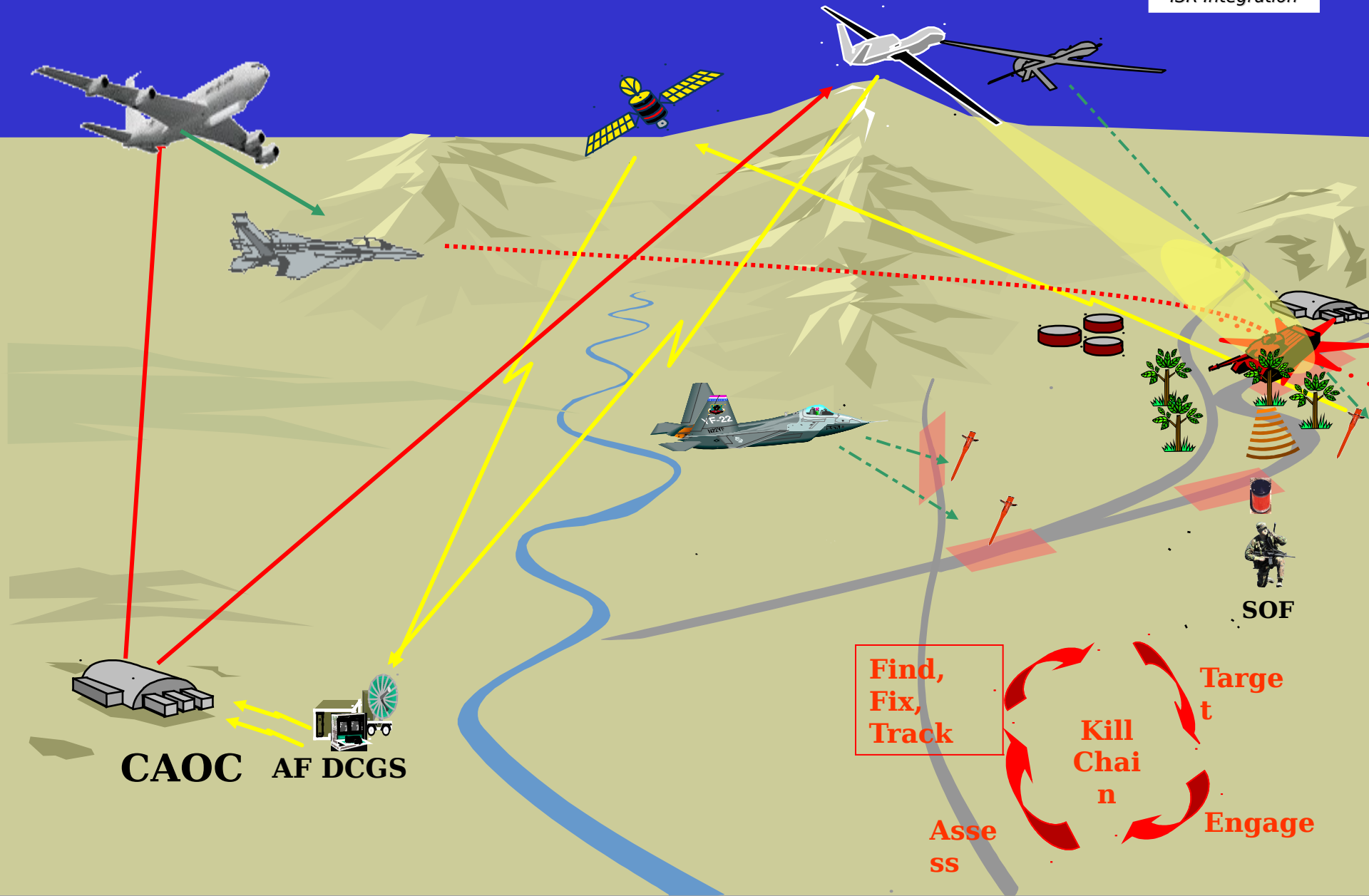**21 November 2002**

Presented By:
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- **Documented DESERT STORM Deficiency – Couldn't Locate and Kill Time Critical Targets - 1992.**
- **EUCOM C-MNS: Locate and ID "Tanks Under Trees" - 1999.**
- **DIA/CMO & DUSD (AS&C) Funded UGS ACTD - ~$20M.**
  - **1996-1999**
  - **CMO/TCO Funded Sandia National Laboratory to Develop STEEL EAGLE (SE).**
  - **Demonstrated Air Delivered Unattended Seismic and Acoustic Sensors Could Detect, Locate, and ID TCTs**

- **FY 99/01 ESC/SR funded to Initiate Transition From ACTD to R&D, Dev / Production Acquisition (~$1.9M)**
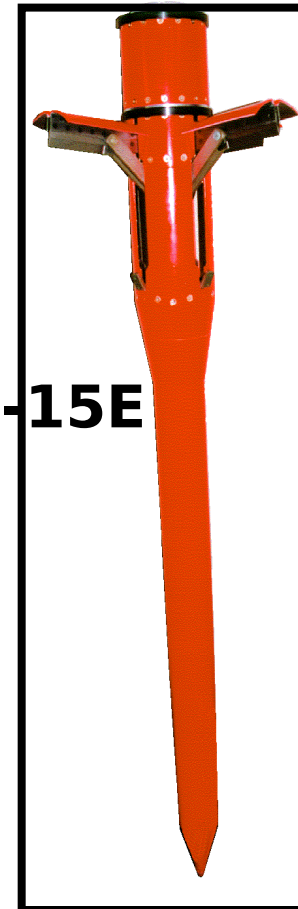- **FY02 Defense Emergency Relief Funding (DERF) Provided for 25 more SE sensors (~$6.8M) - 9/11 Initiative**

ACTD (STEEL EAGLE)
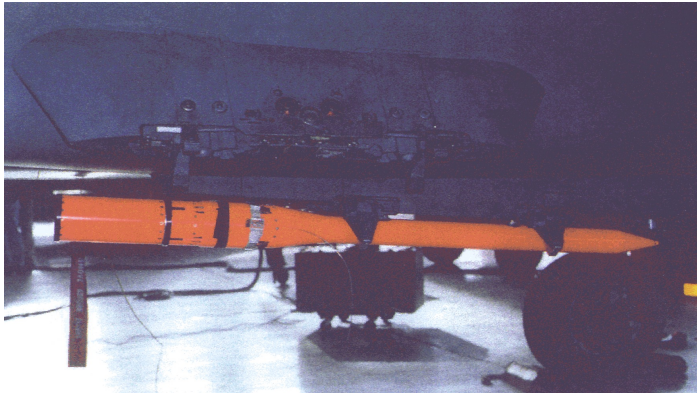
STEEL EAGLE was certified for the F-15E

STEEL EAGLE is a ground penetration device

STEEL EAGLE

STEEL EAGLE to ARGUS

ARGUS Program Objectives

Develop, Acquire, Field and Support a Family of Expendable Micro-sensors (Air Delivered and Hand Emplaced) as a Single System to Detect & Identify Time Critical Targets

– **Plan for Block Upgrades Through Spiral Development for Additional Sensor Types, Communications, and Target Library**

ARGUS

Program Description

Provides 24hr ground sensing capability; Detects/ Identifies/Reports vehicle activity

- Cross-cues ISR assets, TCT near real-time

- Bearing/type ID/time of detect/geo-location

- Primarily supports Intelligence Preparation of the Battlespace/Predictive Battlespace Awareness (IPB/PBA) w/ expanding applications

Program Guidance

-DERF $$ provided to restart ARGUS Acquisition Program to follow STEEL EAGLE Contingency Effort.
-PMD in Final Coordination
-PE # 35148F
-CONOPS signed 16 Aug 02
-ORD May 00, MS B ORD in Review

Program Capabilities

- Must Be Capable of Finding, Fixing, and Tracking Targets Located Within 500 Meters of the Sensor and Identifying Within 200 Meters.
- Communications Interface Component of ARGUS Must Ensure Two-way Global Communications between the sensor and Its Operator Interface.

Major Milestones:

DRAFT RFP RELEASE	Dec 02
RFP RELEASE	Jan 03
PROPOSALS RECEIVED	Mar 03
SOURCE SELECTION	Apr 03
SSA DECISION, MS B, CONTRACT AWARD	May 03

Schedule

ID		'95		'96		'97		'98		'99		'00		'01		'02		'03		'04		'05		'06		'07		'08		'09		'10		'11		'12	
		H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2

- **1** — ACTD sponsored by CMO
- **2** — Sandia Nat'l Labs development
- **3** — ESC identified as SPO
- **4** — RFP witheld (no $$)
- **5** — 9/11
- **6** — 25 ACTDs Procured
- **7** — RFP Prep / Source Select
- **8** — Possible ACTD Follow-on
- **9** — Spiral Development
- **10** — Spiral 1   2   3   4
- **15** — DT
- **16** — OT
- **17** — OA
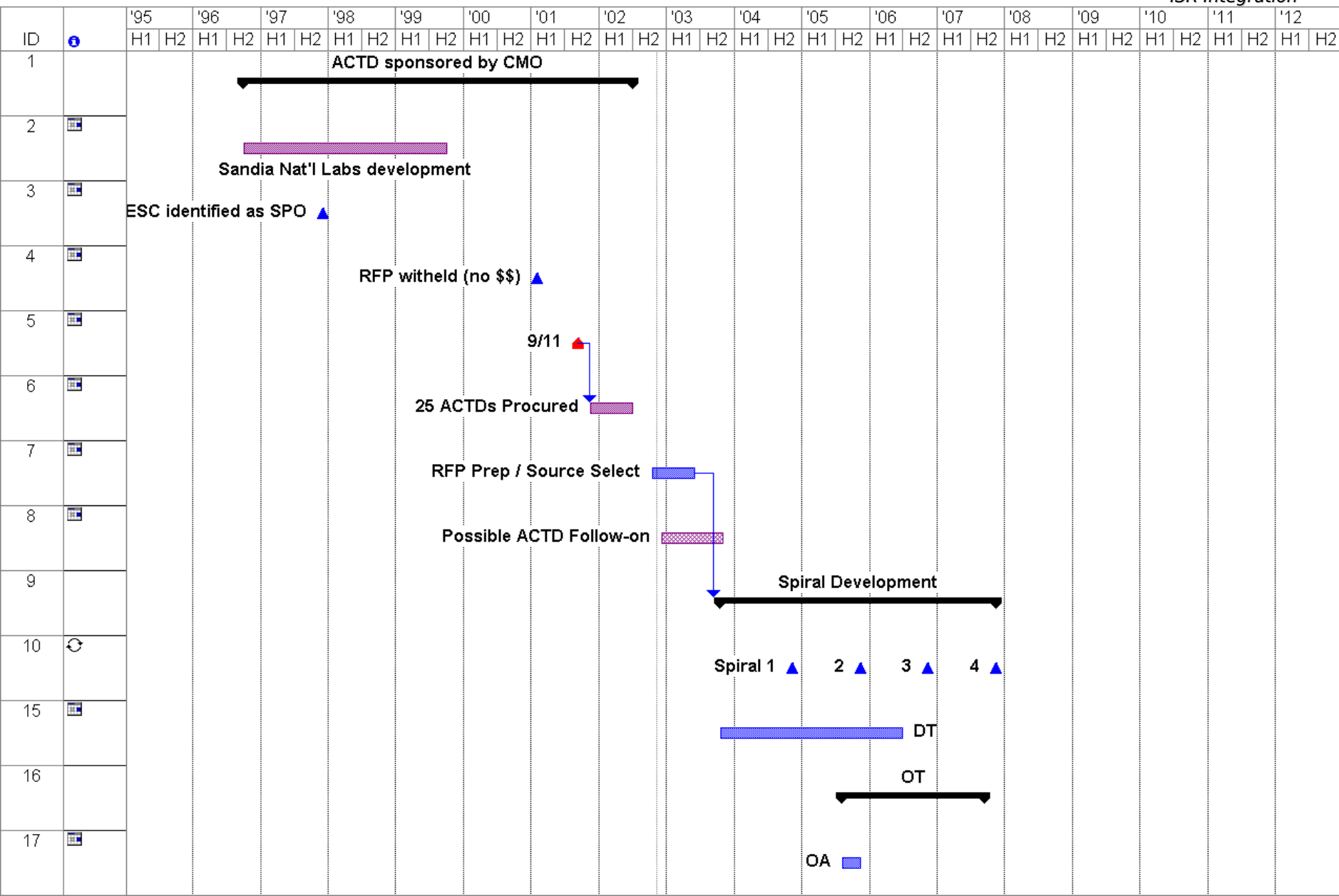
- **Objective: Determine Ability of Industry to Respond to ARGUS Incremental Development & Production Requirements**
  - **March 2000, Received Thirty- Eight (38) Responses – Before Program was Cancelled**
  - **Jun 2002, Received Fifty-Two (52) Responses**

- **Twelve (12) of Twenty (20) Prime Contractors Notified as Highly Competitive**

Acquisition Strategy

- Capitalize on Current Investments (GFI)
- Respond to User Need/Schedule
  - Certified Aero body w/ SE Capability - Spiral 1
  - Future Spirals Contractor Defined
    - Secure Comm, Anti-Tamper, GPS Accreditation
- Open Systems Approach
  - Maximum Use of COTS/GOTS
  - Future Sensors Identified as new Block
- Requirements Managed by Overarching IPT

- **ARGUS provides early and continuous ISR capability in austere locations**

- **Provides cross-cueing of other ISR platforms**

- **Excellent candidate for additional capabilities**

BACKUP SLIDES

Notional ARGUS Architecture

SatCom Link

DCGS

Low Frequency Acoustic Signal

Air Drop ARGUS Sensors

GPS

Seismic Signal

Operations Center

- **Map display of area with sens locations and sensor data**